

YAMAHA PORTATONE

PSR-2

Owner's Guide

Thank you for choosing a Yamaha PortaTone PSR-2. Your PSR-2 is a high-performance electronic keyboard that features the most advanced Yamaha technology for superior sound and features. To ensure that you fully understand the many fine features provided, we urge you to follow the steps outlined in this manual while actually trying out the instrument's features.

Taking Care of Your PortaTone

Your PortaTone will give you years of playing pleasure if you follow the simple rules given below:

1. Avoid placing the PortaTone in areas that are subject to excessive humidity or heat. Do not leave the instrument near heaters or in a car exposed to direct sunlight, for example.
2. Avoid locations in which the instrument is likely to be exposed to excessive dust or moisture.
3. Connections between the PortaTone and any other device must be made with both pieces of equipment turned OFF.

4. Do not subject the instrument to strong physical shocks, and avoid placing heavy objects on it.
5. Use a soft cloth, dry or slightly damp, for cleaning. Never use chemicals such as benzine or thinner.
6. Since the PortaTone contains digital circuitry, it may cause interference if placed too close to radio or television receivers. If this occurs, move the instrument further away from the affected equipment.

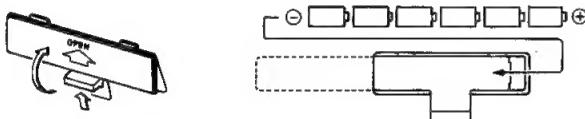
Power Supply

Your PSR-2 will run either from optional batteries or an optional power adaptor. Follow the instructions below according to the power source you intend to use.

● Using Batteries

Six 1.5V D size (SUM-1 or R-20) or equivalent alkaline batteries (sold separately) must first be installed in the battery compartment.

1. Open the battery compartment cover located on the instrument's bottom panel.
2. Insert the six batteries, being careful to follow the polarity markings on the cabinet.
3. Replace the compartment cover, making sure that it locks firmly in place.



Caution:

1. When the batteries run down, replace them with a complete set of six new batteries. NEVER mix old and new batteries.
2. To prevent possible damage due to battery leakage, remove the batteries from the instrument if it is not to be used for an extended period of time.

● Using An Optional Power Adaptor

Plug the DC output cable from an optional PA-1, PA-1B or PA-3 Power Adaptor into the DC(9-12V)IN jack on the rear panel, then plug the adaptor into a convenient wall AC power socket.

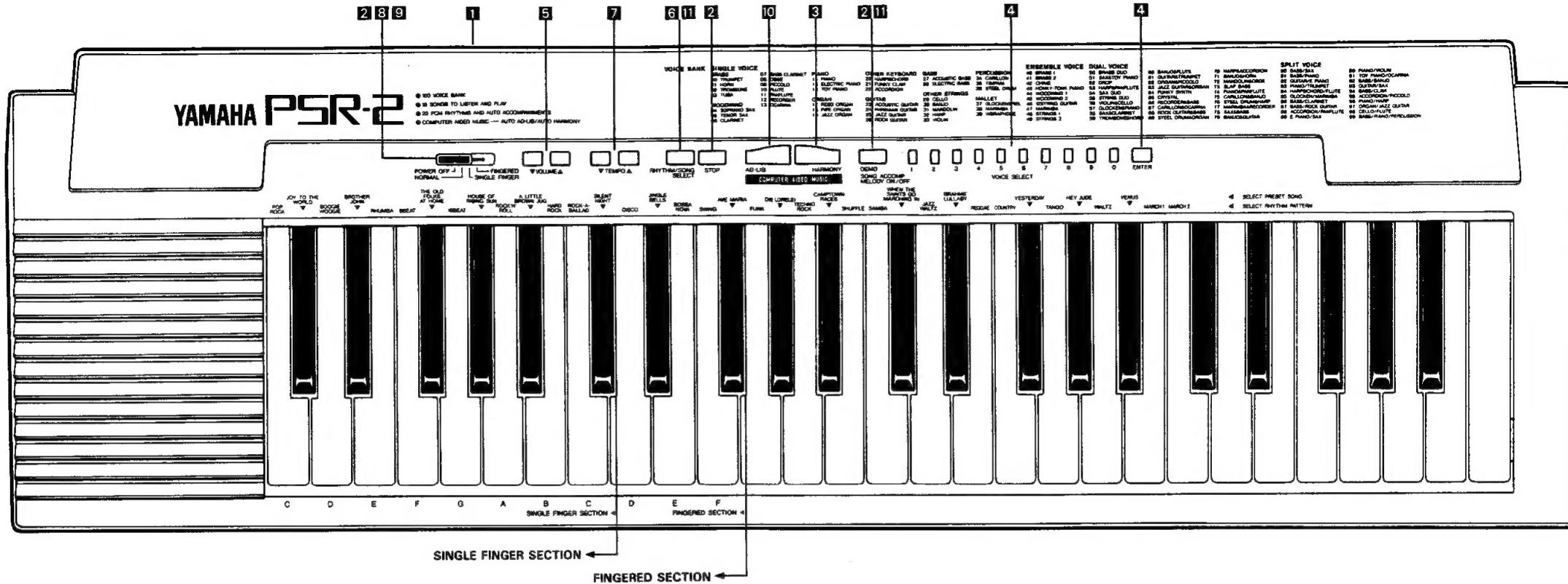
Use ONLY a Yamaha PA-1, PA-1B or PA-3 Power Adaptor to power your instrument from the AC mains. Attempting to use other AC adaptors could result in serious damage to your PSR-2.

Using Headphones or an External Sound System

The Rear-panel HEADPHONES/AUX. OUT Jack 1

A standard pair of stereo headphones can be plugged in here for private practice or late-night playing. The internal speaker system is automatically shut off when a pair of headphones is plugged into the HEADPHONES/AUX. OUT jack. The HEADPHONES/AUX. OUT jack can also be used to deliver the output of the PSR-2 to a keyboard amplifier, stereo sound system, mixing console or tape recorder. Use the optional Yamaha connecting cord to connect the HEADPHONES/AUX. OUT jack to your sound system.





Playing the PSR-2

Automatic Playback of the Demo Tune 2

Slide the switch to the NORMAL position, and press the button. The demo tune will continue playing until you press the or button.

* Tempo and volume can be varied while the demo tune is playing.

Playing in the Harmony Mode 3

When the PSR-2 is initially turned ON, voice number 00 (TRUMPET) is automatically selected and the HARMONY mode is turned OFF.

The HARMONY mode can be turned ON or OFF by pressing the .

In the HARMONY mode, playing single notes on the keyboard produces automatic two- or four-part harmony, depending on the selected voice. The HARMONY mode is most useful with SINGLE FINGER or FINGERED Auto Accompaniment, described later.

When HARMONY is turned OFF, you can play single notes as well as your own chords or harmonies on the keyboard.

- If a SPLIT voice is selected, harmony will not be applied to the lower voice even if the HARMONY mode is ON.
- Only single notes can be played when the HARMONY mode is ON — with the exception of the lower voice when a SPLIT voice is selected.

Selecting Voices 4

The PSR-2 has 100 different voices (00 through 99, listed in the VOICE BANK printed on the top panel) that can be selected by using the and buttons. To select any voice press two number buttons and then the ENTER button. To select voice number 04 (SOPRANO SAX), for example, press , , and then . The closed hi-hat voice will sound to confirm that the above buttons have been properly pressed.

The PSR-2 voices are divided into four categories:

SINGLE (voices 00—39): Single voices.

ENSEMBLE (40—49): Voices with an ensemble sound.

DUAL (50—79): Combinations of two voices.

SPLIT (80—99): Split voices with one voice playable on the left-hand section of the keyboard (to the left of the marker) and the other playable on the right-hand section.

- SPLIT voices can only be used in the NORMAL mode. When the SINGLE FINGER or FINGERED Auto Accompaniment mode is selected only the upper voice will be used.

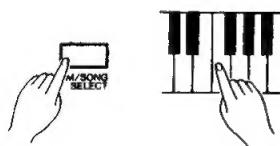
Adjusting the Volume 5

The PSR-2 volume can be adjusted in 11 steps. The volume is automatically set to "normal" when the POWER switch is turned ON.

Press the VOLUME button to increase volume or the VOLUME button to decrease volume. The volume is increased or decreased slightly each time the corresponding button is pressed. Press both the and buttons together to restore the normal volume setting.

Playing a Rhythm Pattern 6

The PSR-2 has 22 different rhythm patterns that can be selected and played by pressing the appropriate white key on the keyboard while holding the .



To play the SWING rhythm, for example, hold the button and press the white key on the keyboard labelled "SWING" above the keyboard. The SWING rhythm will begin playing immediately.

The rhythm pattern can be stopped at any time by pressing the .

- A different rhythm pattern can be selected in the same way even while a rhythm pattern is playing. In this case the new rhythm pattern begins playing from the beginning of the next measure.

Adjusting the Tempo (speed) of the Rhythm Pattern 7

The tempo of the selected rhythm pattern can be adjusted in 16 steps.

40 50 60 73 80 92 100 112 120 132 146 159 184 200 225 240 (beats per minute)

A tempo of 120 beats per minute is automatically selected when the POWER/MODE switch is initially turned ON.

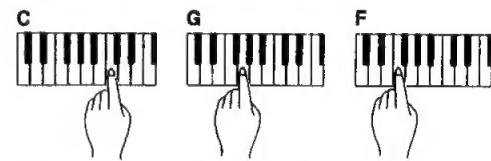
Press the TEMPO button to increase the tempo or the TEMPO button to decrease the tempo. The tempo is increased or decreased by one step each time the corresponding button is pressed. Press both the and buttons together to restore the normal "120" tempo setting.

Automatic Accompaniment

SINGLE FINGER Mode 8

SINGLE FINGER Auto Accompaniment makes it simple to produce beautifully orchestrated accompaniment using major, seventh, minor and minor-seventh chords by pressing a minimum number of keys in the SINGLE FINGER SECTION of the keyboard (to the left of the SINGLE FINGER SECTION marker). The bass and chord accompaniment produced is perfectly matched to the selected rhythm pattern.

1. Slide the switch to the SINGLE FINGER position.
2. Select the desired rhythm in the normal way. The closed hi-hat voice will sound to confirm that the rhythm select key has been properly pressed. Although you can also select the melody (upper keyboard) voice you intend to use in the normal way, the PSR-2 automatically determines the voices to be used for the accompaniment bass and chords.
3. Press a Key in the SINGLE FINGER SECTION of the keyboard to start the accompaniment. If you press a "C" key, for example, a C-major accompaniment will be played. Press another key in the SINGLE FINGER SECTION to select a new chord. The key you press will always determine the "root" of the chord played (i.e. "C" for a C chord).



Playing Minor, Seventh, and Minor-seventh Chords

- For a minor chord, press the root key and a black key to its left.
- For a seventh chord, press the root key and a white key to its left.
- For a minor-seventh chord, press the root key and a white and black key to its left.



- The automatic accompaniment will continue playing even if you lift your fingers from the Auto Bass Chord keys. You only need to press the Auto Bass Chord keys when changing chords.

4. Press the button to stop the accompaniment.

FINGERED Mode 9

The FINGERED mode is ideal if you already know how to play chords on a keyboard, since it allows you to supply your own chords for the Auto Bass Chord feature.

1. Slide the switch to the FINGERED position.
2. Select the desired rhythm in the normal way.
3. As soon as you play any chord in the FINGERED SECTION of the keyboard (to the left of the FINGERED SECTION marker), the PSR-2 will automatically begin to play the chord along with the selected rhythm and an appropriate bass line. The accompaniment will continue playing even if you release the Auto Bass Chord keys. When changing chords, be sure to release all keys before playing a new chord.
4. Press the button to stop the accompaniment.

The PSR-2 will accept the following chord types:

- Major
- Minor
- Major seventh
- Minor seventh
- Seventh
- Diminished
- Augmented

• All other FINGERED mode operations are the same as in the SINGLE FINGER mode.

Automatic Ad-Lib Phrases 10

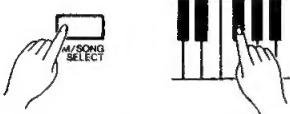
Press the  button briefly while the AUTO ACCOMPANIMENT is running to produce a short "ad-lib" phrase that can be used as a "fill-in" for your performance. The AD-LIB button can be held to produce longer ad-lib lines.

- If the AD-LIB button is pressed in the NORMAL mode, a C-major ad-lib phrase will be produced.

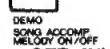
Song Accompaniment □

The PSR-2 can play the accompaniment for 15 different songs that you can play along with, listed above the keyboard.

To select and start playback of a song accompaniment, hold the  button and press the black key on the keyboard corresponding to the desired song. The selected song will begin with a two-measure count-in.



When a song accompaniment is first started, the melody for that song will also begin playing. If you want to mute the melody and leave only the accompaniment

in order to play along, press the  button. The  button alternately turns the melody ON or OFF. When the melody is turned OFF, it is possible to select a different voice using the standard voice selection procedure.

The song accompaniment can be stopped at any time by pressing the  button.

• Refer to the SONG ACCOMPANIMENT SCORE on the reverse side.

Troubleshooting

Symptoms	Remedies
Reduced volume. Distortion.	Replace batteries.
Not all the notes are heard when you play a number of notes simultaneously.	The PSR-2 can produce a maximum of 8 notes at the same time (not including the rhythm sounds). Demo playback, automatic accompaniment and song accompaniment use up part of this quota.

FCC INFORMATION

IMPORTANT NOTICE: DO NOT MODIFY THIS UNIT! This product, when installed, as indicated in the instructions contained in this manual, meets FCC requirements. Modifications not expressly approved by Yamaha may void your authority, granted by the FCC, to use the product.

IMPORTANT: When connecting this product to accessories and/or another product use only high quality shielded cables. Cable/s supplied with this product MUST be used. Follow all installation instructions. Failure to follow instructions could void your FCC authorization to use this product in the USA.

NOTE: This product has been tested and found to comply with the requirements listed in FCC Regulations, Part 15 for Class "B" digital devices. Compliance with these requirements provides a reasonable level of assurance that your use of this product in a residential environment will not result in harmful interference with other electronic devices. This equipment generates/uses radio frequencies and, if not installed and used according to the instructions found in the users manual, may cause interference harmful to the operation of other electronic devices. Compliance with FCC regulations does not guarantee that interference will not occur in all installations. If this product is found to be the source of interference, which can be determined by turning the unit "OFF" and "ON", please try to eliminate the problem by using one of the following measures:

Relocate either this product or the device that is being affected by the interference.

Utilize power outlets that are on different branch (circuit breaker or fuse) circuits or install AC line filters.

In the case of radio or TV interference, relocate/reorient the antenna. If the antenna lead-in is 300 ohm ribbon lead, change the lead-in to co-axial type cable.

If these corrective measures do not produce satisfactory results, please contact the local retailer authorized to distribute this type of product. If you can not locate the appropriate retailer, please contact: Yamaha Corporation of America, Electronic Service Division, 6600 Orangethorpe Ave, Buena Park CA, 90620

Specifications

Keyboard: 49keys (C1-C5)
Voices: 100voices

SINGLE VOICE: TRUMPET, HORN, TROMBONE, TUBA, SOPRANO SAX, TENOR SAX, CLARINET, BASS CLARINET, OBOE, PICCOLO, FLUTE, PANFLUTE, RECORDER, OCARINA, PIANO, ELECTRIC PIANO, TOY PIANO, REED ORGAN, PIPE ORGAN, JAZZ ORGAN, HARPSICHORD, FUNKY CLAVI, ACCORDION, ACOUSTIC GUITAR, HAWAIIAN GUITAR, JAZZ GUITAR, ROCK GUITAR, ACOUSTIC BASS, ELECTRIC BASS, CELLO, BANJO, MANDOLIN, HARP, VIOLIN, CARILLON, TIMPANI, STEEL DRUM, GLOCKENSPIEL, MARIMBA, VIBRAPHONE

ENSEMBLE VOICE: BRASS 1, BRASS 2, CHIME, HONKY-TONK PIANO, WOODWIND 1, WOODWIND 2, 12STRING GUITAR, MARIMBA, STRINGS 1, STRINGS 2

DUAL VOICE: BRASS DUO, SAX & TOY PIANO, DROP, HARP & PANFLUTE, SAX DUO, STRING DUO, VIOLIN & CELLO, GLOCKEN & PIANO, SAX & CLARINET, TROMBONE & HORN, BANJO & FLUTE, GUITAR & TRUMPET, ORGAN & PICCOLO, JAZZ GUITAR & ORGAN, FUNKY SYNTH, CRYSTAL, RECORDER & BASS, CARILLON & OCARINA, ROCK GUITAR & BASS, STEEL DRUM & ORGAN, HARP & ACCORDION, BANJO & HORN, MANDOLIN & OBOE, SLAP BASS, PIANO & PANFLUTE, CARILLON & BANJO, STEEL DRUM & HARP, MARIMBA & RECORDER, SAX & BASS, BANJO & GUITAR

SPLIT VOICE: BASS/SAX, BASS/PIANO, GUITAR/E.PIANO, PIANO/TRUMPET, HARPSICHORD/FLUTE, GLOCKEN/MARIMBA, BASS/CLARINET, BASS/ROCK GUITAR, ACCORDION/PANFLUTE, E.PIANO/SAX, PIANO/VIOLIN, TOY PIANO/OCARINA, BASS/BANJO, GUITAR/SAX, BASS/CLAVI, ACCORDION/PICCOLO, PIANO/HARP, ORGAN/JAZZ GUITAR, CELLO/FLUTE, BASS/PIANO/PERCUSSION

POP ROCK, BOOGIE WOOGIE, RHUMBA, 8BEAT, 16BEAT, ROCK'N'ROLL, HARD ROCK, ROCK-A-BALLAD, DISCO, BOSSA NOVA, SWING, FUNK, TECHNO ROCK, SHUFFLE, SAMBA, JAZZ WALTZ, REGGAE, COUNTRY, TANGO, WALTZ, MARCH 1, MARCH 2

Song Accompaniment: JOY TO THE WORLD, BROTHER JOHN, THE OLD FOLKS AT HOME, HOUSE OF RISING SUN, A LITTLE BROWN JUG, SILENT NIGHT, JINGLE BELLS, AVE MARIA, DIE LORELEI, CAMPFTOWN RACES, WHEN THE SAINTS GO MARCHING IN, BRAHMS' LULLABY, YESTERDAY, HEY JUDE, VENUS

Other Controls: VOLUME, TEMPO, RHYTHM/SONG SELECT, STOP, AD-LIB, HARMONY, DEMO (SONG ACCOMP. MELODY ON/OFF), VOICE SELECT 1-6, ENTER, POWER/MODE (OFF, NORMAL, SINGLE FINGER, FINGERED)

Auxiliary Jacks: HEADPHONES/AUX. OUT, DC 9-12V IN

Main Amplifiers: 3W

Speakers: 10cm (3-15/16")

Rated Voltage: DC 9V (Six SUM-1, "D" size, R-20 or equivalent batteries), AC Power Adaptor (PA-1, PA-1B or PA-3)

Dimensions: 844mm x 252.9mm x 105.3mm

(33-1/4" x 9-15/16" x 4-1/8")

Weight: 2.8kg (6.2lbs.) excluding batteries

* Specifications subject to change without notice.

The serial number of this product may be found on the bottom of the unit. You should note this serial number in the space provided below and retain this manual as a permanent record of your purchase to aid identification in the event of theft.

Model No. PSR-2

Serial No.

Concerning Warranty

This product was made for international distribution, and since the warranty for this type of product varies from marketing area to marketing area, please contact the selling agency for information concerning the applicable warranty and/or service policies.

YAMAHA
YAMAHA CORPORATION
P.O.Box 1, Hamamatsu, Japan

SONG ACCOMPANIMENT SCORE

Published by Hal Leonard Publishing Corporation for Yamaha Corporation.

March 1 ♩ = 112

F G7 C

JOY TO THE WORLD

This musical score consists of two staves of music. The top staff is for a saxophone and toy piano, starting with a quarter note F, followed by a G7 chord, and then a quarter note C. The bottom staff is for a harmonic instrument, starting with a G7 chord, followed by a F chord, and then a C chord. The score is labeled '51 SAX & TOY PIANO' and includes arrows indicating when the harmonic instrument should start ('HARMONY On') and stop ('HARMONY Off').

51 SAX & TOY PIANO

HARMONY On

G7

F

C

G7

C

The continuation of the musical score for 'Joy to the World' shows the harmonic instrument playing a series of eighth-note chords. The first chord is labeled 'HARMONY Off', followed by a G7 chord, then an F chord, and finally a C chord. The score is labeled 'HARMONY On' at the end of the second measure.

Funk ♩ = 120

F C7 F

65 CRYSTAL

BROTHER JOHN

This musical score consists of two staves of music. The top staff is for a crystal instrument, starting with a quarter note F, followed by a C7 chord, and then a quarter note F. The bottom staff is for a harmonic instrument, starting with a B♭ chord, followed by an F chord, and then continuing with a series of eighth-note chords. The score is labeled '65 CRYSTAL' and includes an arrow indicating when the harmonic instrument should start ('HARMONY On').

B♭

F

HARMONY On

B♭ B♭m F

The continuation of the musical score for 'Brother John' shows the harmonic instrument playing a series of eighth-note chords. The first chord is labeled 'HARMONY On', followed by a B♭ chord, then a B♭m chord, and finally an F chord.

8 beat $\text{♩} = 120$

THE OLD FOLKS AT HOME

Musical score for "The Old Folks at Home". The score consists of three staves of music. The first staff is labeled "58 SAX & CLARINET". The second staff is labeled "HARMONY On". The third staff is labeled "HARMONY Off". Chords are indicated above the notes: C G7 C G7 C F C G7 G C C F G7 C.

Reggae $\text{♩} = 132$ ($\text{♩} = \overbrace{\text{♩}\text{♩}}^3$)

HOUSE OF RISING SUN

Musical score for "House of Rising Sun". The score consists of five staves of music. The first staff is labeled "19 JAZZ ORGAN". The second staff is labeled "HARMONY On". The third staff is labeled "HARMONY Off". Chords are indicated above the notes: E7 Am C D F Am, C E7 Am C D, F Am E7 Am E7 Am, C D E7 Am E7 Am, C D E7 Am E7 Am.

A LITTLE BROWN JUG

Swing $\text{J} = 159$ ($\text{F} = \frac{3}{4}$)

04 SOPRANO SAX

HARMONY On

SILENT NIGHT

Jazz Waltz $\text{J} = 112$

39 VIBRAPHONE

HARMONY On

HARMONY Off

Rock'n' Roll ♩ = 184

JINGLE BELLS

C7 F B♭

79 BANJO & GUITAR

B♭ C7 F C7 F

61 GUITAR & TRUMPET HARMONY On

B♭ F G7

C7 F B♭

F C7 F B♭7 F7

Rock-A-Ballad ♩ = 73

AVE MARIA

C Am7 C G7 Am7 F G7 C Caug Am7

32 HARP

B7 G1dim A7 G7 A7 G7 D7 G7

C G7 Am7 G7 E7

HARMONY On

Dm7 Dm F Adim G G7 C Am7 C G7 C

Waltz $\text{♩} = 132$

DIÉ LORELEI

49 STRINGS 2

C G₇ C F C Dm₇

F C Dm₇ C G₇

C G G₇dim A_m

G D₇ G G₇ C F

C Dm₇ C 33 VIOLIN G₇ HARMONY On C

C G₇ C G₇ C

Country $\text{♩} = 132$

CAMPTOWN RACES

30 BANJO

C G₇ C G₇ C G₇ C

F C G₇ C G₇

C G₇ C F C G₇ C

71 BANJO & HORN HARMONY On G₇ C

March 2 $\text{♩} = 132$

WHEN THE SAINTS GO MARCHING IN

Musical score for "When the Saints Go Marching In". The score consists of four staves of music. The first staff is for the brass section, starting with F and F₇. The second staff is for the brass section, starting with C₇. The third staff is for the brass section, starting with F. The fourth staff is for the brass section, starting with F and C₇, with a note labeled "HARMONY On" above it. An arrow points from the word "HARMONY" to the C₇ note. The fifth staff is for the trumpet, starting with F, F₇, and B_♭. The sixth staff is for the trumpet, starting with F, G₇, C₇, and F. The seventh staff is for the trumpet, ending with B_♭ and C₇. The eighth staff is for the trumpet, ending with C₇. The ninth staff is for the trumpet, ending with B_♭ and C₇. The tenth staff is for the trumpet, ending with C₇.

Waltz $\text{♩} = 132$

BRAHMS' LULLABY

Musical score for "Brahms' Lullaby". The score consists of six staves of music. The first staff is for the carillon and ocarina, starting with F and C₇. The second staff is for the carillon and ocarina, starting with F. The third staff is for the carillon and ocarina, starting with C₇. The fourth staff is for the carillon and ocarina, starting with F, B_♭, and F. The fifth staff is for the carillon and ocarina, starting with C₇. The sixth staff is for the carillon and ocarina, starting with F. The seventh staff is for the carillon and ocarina, starting with C₇. The eighth staff is for the carillon and ocarina, starting with F, B_♭, and F. The ninth staff is for the carillon and ocarina, starting with B_♭. The tenth staff is for the carillon and ocarina, starting with F, C₇, and F. The eleventh staff is for the carillon and ocarina, starting with F, B_♭, and F. The twelfth staff is for the carillon and ocarina, starting with C₇. The thirteenth staff is for the carillon and ocarina, starting with F, B_♭, and F. The fourteenth staff is for the carillon and ocarina, starting with B_♭. The fifteenth staff is for the carillon and ocarina, starting with F, C₇, and F. The sixteenth staff is for the carillon and ocarina, starting with F, B_♭, and F.